付録A　仕　様

型　名		Express5800/SG300a
		N8100-909
CPU	タイプ	Intel® Pentium® 4 Processor
	クロックスピード	2AGHz
	キャッシュメモリ	512KB（二次）
	標準	1個
	最大	1個
チップセット		Intel 845
メモリ	標準	256MB（最大1GB）
	ﾒﾓﾘﾓｼﾞｭｰﾙ	SDRAM DIMM
	誤り検出・訂正機能	あり（ECC）
ハードディスク		40GB（40GB×1）
インタフェース	LAN	100Base-TX/10BASE-T×4
	IDE	2チャネル（CD-ROMドライブ、ハードディスク用）
フロッピーディスクドライブ		3.5インチ×1（1.44MB、720KB対応）
CD-ROMドライブ		10～24倍速以上（ATAPI、トレーロード式）
外部用インタフェース	シリアル	D-sub 9-pin（RS-232C規格準拠）×2
	ネットワーク	RJ-45×4
筐体デザイン		ラックマウントモデル（1U）
外形寸法		427mm（幅）×433mm*（奥行き）×43.2mm（高さ）　* フロントベゼル取り付け時は477mm
質量（最大）		10kg
電源		AC100V±10%, 50/60Hz±1Hz
消費電力		210VA、200W
環境条件		温度:10～35℃、湿度:20～80%（ただし、結露しないこと）

付録

付録B　二重化機能のログメッセージ

二重化機能では動作の履歴や異常の検出をシステムログ(syslog)に出力します。出力するメッセージとその説明、対処方法は以下のようになります。

イベントID	イベント分類	メッセージ	説明	対処
IDM001	情報	Starting.....	クラスタシステムの起動中です。	－
IDM001	情報	Shutting down.....	クラスタシステムの終了中です。	－
IDM003	情報	stopping all process.....	内部プロセスが異常終了したため、全プロセスを停止します。	システムを再起動してください。
IDM004	情報	Halting system.....	内部プロセスが異常終了したため、システムを停止します。	
IDM005	情報	Rebooting system.....	内部プロセスが異常終了したため、システムを再起動します。	－
IDM006	情報	Restarting main process.....	main プロセスが異常終了したため、main プロセスを再起動します。	－
IDM007	情報	Restarting send process.....	sendプロセスが異常終了したため、sendプロセスを再起動します。	－
IDM008	情報	Restarting recv process.....	recvプロセスが異常終了したため、recvプロセスを再起動します。	－
IDM009	情報	Auto startup is disabled.	自動起動に設定されていません。	基本設定ツール（fwsetup）で自動起動するように設定してください。
EDM001	異常	Main process abnormal exit.....	内部異常を検出したため、mainプロセスが異常終了しました。	引き続きRestarting main processが出力されれば自動リカバリに成功しています。
EDM002	異常	Send process abnormal exit.....	内部異常を検出したため、HB送信プロセスが異常終了しました。	引き続きRestarting send processが出力されれば自動リカバリに成功しています。
EDM003	異常	Recv process abnormal exit.....	内部異常を検出したため、HB受信プロセスが異常終了しました。	引き続きRestarting recv processが出力されれば自動リカバリに成功しています。
EDM007	異常	Configuration file is invailed.	設定がされていないか、設定の情報が不正です。	基本設定ツール（fwsetup）で設定内容を確認してください。
EDM008	異常	Critical error occured	致命的な異常が発生しました。	システムを再起動してください。
IGM001	情報	%1 start.	業務%1が起動しました。Firewall機能が起動された側のサーバで出力されます。	－
IGM002	情報	%1 stop.	業務%1が停止しました。Firewall機能が停止された側のサーバで出力されます。	－
IGM003	情報	%1 failover start.	業務%1のフェイルオーバー処理を開始します。	－
IGM004	情報	%1 failback start.	業務%1のフェイルバック処理を開始します。	－
EGM001	異常	%1 start failed.	業務%1が起動に失敗しました。	リソースに異常がなければ、システムを再起動してください。
EGM002	異常	%1 stop failed.	業務%1が停止に失敗しました。	リソースに異常がなければ、システムを再起動してください。

イベントID	イベント分類	メッセージ	説明	対処
EGM003	異常	%1(%2) error. stop %2.	リソース%1に異常が発生しました。再起動できなかったため、業務%2を停止します。	%1が、 - FIPの場合、[ERFxxx]の項を参照してください。 - EXECの場合、[EREXXX]の項を参照してください。 - IPWの場合、[ERIxxx]の項を参照してください。 - PARPの場合、[ERPxxx]の項を参照してください。
EGM004	異常	%1(%2) error. failover %2.	リソース%1に異常が発生しました。業務%2をフェイルオーバします。	%1が、 - FIPの場合、[ERFxxx]の項を参照してください。 - EXECの場合、[EREXXX]の項を参照してください。 - IPWの場合、[ERIxxx]の項を参照してください。 - PARPの場合、[ERPxxx]の項を参照してください。
IMN001	情報	all node wake up.	起動待ち合わせ時間内に、全サーバが起動しました。	—
IMN002	情報	wait timeout.	起動待ち合わせがタイムアウトしました。	待機系サーバでFirewall機能が動作している可能性があります。運用系サーバが起動してきたら、必要に応じてFirewall機能を運用系サーバに移動してください。
IMN003	警告	%1 down.	サーバ%1がダウンしました。	サーバ%1の障害を取り除いてください。引き続きIGM001のイベントが登録されていれば、フェイルオーバが成功しています。
IMN004	情報	%1 up.	サーバ%1が起動しました。	—
IMN010	情報	ignore stop message from %1.	サーバ%1からの停止メッセージを無視しました。	—
EMN001	異常	boot fail. stop.	内部異常のためmainプロセスの起動に失敗しました。	システムを再起動してください。
IRF001	情報	%1(%2):%3/%4 turned available.	業務%1のFIPリソース%2(IPアドレス%3／ネットマスク%4)の活性に成功しました。(異常状態からの復帰時のみ出力)	—
ERF001	異常	%1(%2):%3/%4 can’t enable.	業務%1のFIPリソース%2(IPアドレス%3／ネットマスク%4)の活性に失敗しました。	既に使用されているIPアドレスとFIPが重複している可能性があります。確認してください。
IRE001	情報	%1(%2):%3 turned executable.	業務%1のEXECリソース%2(実行パス%3)の実行に成功しました。(異常状態からの復帰時のみ出力)	—
ERE001	異常	%1(%2):%3 can’t execute.	業務%1のEXECリソース%2(実行パス%3)の実行に失敗しました。	/opt/necfws/bin/ckcstat /opt/necfws/bin/ckfwalive のパスが存在していることを確認してください。
ERE002	異常	%1(%2):%3 is disappear.	業務%1のEXECリソース%2(実行パス%3)の監視で異常が発生しました。	Firewall 機能に異常が発生した可能性があります。VPN-1/FireWall-1 の管理GUIで状況を確認してください。
IRI001	情報	%1(%2):%3 turned reachable.	業務%1のIPWリソース%2(監視アドレス%3)との通信が復帰しました。	—
ERI001	異常	%1(%2):%3 can’t reach.	業務%1のIPWリソース%2(監視アドレス%3)の監視で異常が発生しました。	監視対象のネットワークを確認してください。
IRP001	情報	%1(%2):%3 turned available.	業務%1のPARPリソース%2(IPアドレス%3)の活性に成功しました。(異常状態からの復帰時のみ出力)	—
ERP001	異常	%1(%2):%3 can’t enable.	業務%1のFIPリソース%2(IPアドレス%3の活性に失敗しました。	既に使用されているIPアドレスとPARPアドレスが重複している可能性があります。確認してください。

付録C　保守サービス会社網一覧

本装置および関連製品のアフターサービスは、お買い上げの弊社販売店、最寄りの弊社またはNECフィールディング株式会社までお問い合わせください。下記にNECフィールディングのサービス拠点所在地一覧を示します。

（受付時間：AM9:00～PM5:00　土曜日、日曜日、祝祭日を除く）

次のホームページにも最新の情報が記載されています。

http://www.fielding.co.jp/

このほか、弊社販売店のサービス網がございます。お買い上げの販売店にお問い合わせください。

トラブルなどについてのお問い合わせは下記までご連絡ください（電話番号のおかけ間違いにご注意ください）。その他のお問い合わせについては、下表を参照してください。

0120-911-111

2004年5月現在

都道府県名	拠点名	電話番号	郵便番号	所在地
北海道	札幌支店	011-221-3705	060-0042	札幌市中央区大通西4-1　新大通ビル9F
	新札幌支店	011-894-1131	004-0041	札幌市厚別区大谷地東4-2-20　第二西村ビル1F
	釧路営業所	0154-43-2361	085-0847	釧路市大町1-1-1　道東経済センタービル7F
	旭川支店	0166-24-2098	070-0033	旭川市三条通9丁目左1号　明治生命旭川ビル1F
	オホーツク営業所	0157-25-7520	090-0024	北見市北四条東3-1-1　富士火災北見ビル3F
	苫小牧営業所	0144-36-3846	053-0027	苫小牧市王子町3-2-23　朝日生命苫小牧ビル2F
	室蘭営業所	0143-46-3180	050-0083	室蘭市東町2-24-4　石井第5ビル3F
	函館支店	0138-54-5642	040-0001	函館市五稜郭町1-14　住友生命五稜郭ビル3F
	道東支店	0155-25-4892	080-0013	帯広市西三条南10-32　日本生命帯広駅前ビル5F
	小樽営業所	0134-24-5685	047-0036	小樽市長橋3-4-14
青森	青森支店	017-739-8501	030-0113	青森市第二問屋町4-1-20 NECソフトウェア青森本社ビル1F
	八戸営業所	0178-44-4354	031-0081	八戸市柏崎1-10-2　八戸第一生命ビル1F
	弘前営業所	0172-34-9083	036-8002	弘前市駅前2-2-2　弘前第一生命ビル1F
岩手	盛岡支店	019-635-3011	020-0866	盛岡市本宮3-13-20
	一関営業所	0191-25-6531	021-0041	一関市赤荻字月町218-2
宮城	仙台支店	022-292-1900	983-0852	仙台市宮城野区榴岡3-4-18　タカノボル22ビル4F
秋田	秋田支店	018-863-7938	010-0951	秋田市山王1-3-29
山形	山形支店	023-631-3502	990-2445	山形市南栄町3-6-34
	鶴岡営業所	0235-25-8386	997-0014	鶴岡市大宝寺町1-30
	米沢営業所	0238-24-1418	992-0027	米沢市駅前3-5-22　かなつビル1F
福島	郡山支店	024-938-5209	963-8022	郡山市西ノ内1-22-13
	福島支店	024-536-3703	960-8074	福島市西中央5丁目6番1号
	いわき営業所	0246-29-5301	970-8034	いわき市平上荒川字桜町34-1
	会津若松営業所	0242-28-1627	965-0818	会津若松市東千石2-1-45
茨城	鹿島営業所	0299-82-4860	314-0014	鹿嶋市光3　住友金属構内
	つくば支店	029-860-2002	305-0821	つくば市春日3-22-8
	水戸支店	029-257-1860	310-0911	水戸市見和3-575-3
栃木	宇都宮支店	028-632-8140	321-0954	宇都宮市元今泉2-7-6
	小山営業所	0285-21-1495	323-0807	小山市城東1-14-12　ウエルストン1ビル1F
群馬	群馬支店	027-243-6316	371-0026	前橋市大手町2-6-20　明治安田生命前橋ビル5F
	高崎営業所	027-365-3500	370-0073	高崎市緑町1-22-5
	太田営業所	0276-45-0666	373-0853	太田市浜町58-24

都道府県名	拠点名	電話番号	郵便番号	所在地
埼玉	大宮支店	048-660-1881	331-0812	さいたま市北区宮原町2-85-5
	熊谷営業所	048-527-0597	360-0036	熊谷市桜木町1-1-1　秩父鉄道熊谷ビル4F
	浦和支店	048-866-5471	336-0022	さいたま市南区白幡4-12-19
	川口営業所	048-225-6722	332-0001	川口市朝日6-2-3　あいおい損保・川口東ビル4F
	川越支店	04-2955-7695	350-1331	狭山市新狭山2-11-10
	越谷営業所	048-978-9500	343-0042	越谷市千間台東1-7-25　エムケービル1F
千葉	千葉支店	043-252-4309	260-0045	千葉市中央区弁天1-5-1　白樺ビル5F
	千葉東支店	043-221-6964	260-0843	千葉市中央区末広1-12-15
	成田営業所	0476-22-5390	286-0044	成田市不動ヶ岡2152-2　成田旭ビル1F
	君津営業所	0439-55-7278	299-1144	君津市東坂田1-3-2　京葉君津ビル3F
	船橋支店	047-434-1611	273-0012	船橋市浜町2-1-1　ららぽーと三井ビル1F
	柏営業所	0471-35-2400	277-0827	柏市松葉町2-5-1
	印西営業所	0476-46-4250	270-1352	印西市大塚1-9 千葉ニュータウンエネルギーセンター1F
東京	東京中央支店	03-3456-5213	108-0073	港区三田1-4-28　三田国際ビル1F
	大森支店	03-3764-0007	140-0013	品川区南大井6-25-3　ビリーヴ大森ビル8F
	五反田支店	03-3443-7905	141-0022	品川区東五反田5-25-16　朝日生命五反田ビル1F
	新橋支店	03-3431-9868	105-0012	港区芝大門2-5-5　住友芝大門ビル5F
	赤坂支店	03-5413-1701	107-0052	港区赤坂4-9-6　タク赤坂ビル2F
	三田支店	03-3452-6168	108-0073	港区三田1-4-28　三田国際ビル1F
	渋谷支店	03-5458-3341	150-0036	渋谷区南平台町2-17　日交渋谷南平台ビル8F
	新宿支店	03-3352-8071	160-0022	新宿区新宿4-2-18　新宿光風ビル3F
	池袋支店	03-3985-3194	170-0013	豊島区東池袋1-32-7　三井生命池袋ビル4F
	日本橋支店	03-3297-0783	104-0032	中央区八丁堀4-5-8　ノワール八丁堀2F
	江東支店	03-3649-3230	135-0016	江東区東陽2-2-20　住友不動産東陽駅前ビル1F
	秋葉原支店	03-5821-2474	111-0052	台東区柳橋2-19-6　秀和柳橋ビル8F
	足立営業所	03-3888-7151	120-0034	足立区千住1-11-2　カーニープレイス千住7F
	神田支店	03-3233-2411	101-0064	千代田区猿楽町2-7-8　住友水道橋ビル8F
	府中支店	042-362-6833	183-0036	府中市日新町1-4-5　第六MKビル1F
	立川支店	042-527-2527	190-0022	立川市錦町2-4-6　住友生命立川ビル3F
	小金井支店	042-385-7666	184-0013	小金井市前原町5-9-7
神奈川	神奈川支店	045-314-7625	220-0004	横浜市西区北幸2-8-4　横浜西口KNビル1F
	横須賀営業所	0468-27-3188	238-0004	横須賀市小川町14-1　ニッセイ横須賀センタービル1F
	川崎営業所	044-244-1083	210-0011	川崎市川崎区富士見1-6-3　B2棟3F
	相模原支店	042-746-6111	228-0803	相模原市相模大野7-1-6　相模大野第一生命ビル4F
	厚木支店	046-225-0411	243-0032	厚木市恩名900-4
	平塚支店	0463-21-4777	254-0035	平塚市宮の前1-2　あいおい損保平塚第一ビル2F
	藤沢営業所	0466-22-0204	251-0055	藤沢市南藤沢17-10　コア湘南田村ビル１Ｆ
	小田原営業所	0465-35-6647	250-0042	小田原市荻窪362　第二オギクボビル1F
	玉川支店	044-814-1551	213-0002	川崎市高津区二子5-1-1　高津パークプラザビル4F
新潟	新潟支店	025-243-2315	950-0983	新潟市神道寺275-3
	長岡営業所	0258-35-5217	940-0034	長岡市福住2-3-6　小林石油ビル
	柏崎地区センター	0257-22-2362	945-0833	柏崎市若葉町2-22　柏崎情報開発センター2F
富山	富山支店	076-442-2605	930-0004	富山市桜橋通り1-18　住友生命富山ビル1F
	黒部営業所	0765-54-0447	938-0031	黒部市三日市字新光寺1880-1
	高岡営業所	0766-25-4212	933-0912	高岡市丸の内1-40　高岡商工ビル8F
石川	金沢支店	076-223-3188	920-0864	金沢市高岡町1-39　住友生命金沢高岡町ビル1F
	小松営業所	0761-24-3782	923-0926	小松市龍助町36　小松東京海上ビル3F
	七尾営業所	0767-54-0298	926-0801	七尾市昭和町51-2
福井	福井支店	0776-54-6637	918-8206	福井市北四ツ居町518
山梨	甲府支店	055-226-7564	400-0858	甲府市相生2-3-16　住友海上甲府ビル3F
	富士吉田営業所	0555-23-9515	403-0005	富士吉田市上吉田3726　ヤマナシ文具センタービル2F

都道府県名	拠点名	電話番号	郵便番号	所在地
長野	松本支店	0263-27-7070	399-0033	松本市笹賀6096-1
	岡谷営業所	0266-24-4870	394-0028	岡谷市本町4-5-18
	長野支店	026-224-0050	380-0824	長野市南石堂町1293　清水長野ビル1F
	上田営業所	0268-27-6336	386-0032	上田市諏訪形5-1　豊成ビル5F
	飯田営業所	0265-53-7043	395-0815	飯田市松尾常盤台73-10
岐阜	東濃営業所	0572-55-4578	509-5132	土岐市泉町大富261-8
	岐阜支店	058-275-8801	500-8367	岐阜市宇佐南3-4-7
	高山営業所	0577-33-6524	506-0021	高山市名田町5-95-2　第3みたかビル5F
	中濃営業所	0574-27-6431	505-0041	美濃加茂市太田町飛鹿1927-2
静岡	静岡支店	054-202-6120	422-8061	静岡市森下町1-35　静岡MYタワー2F
	富士営業所	0545-64-6735	416-0944	富士市横割1-17-24　FCビル2F
	沼津支店	0559-73-6001	411-0906	駿東郡清水町八幡88-1
	浜松支店	053-466-0205	435-0047	浜松市原島町111
	掛川営業所	0537-23-2181	436-0056	掛川市中央1-4-2　タウンビル3F
愛知	名古屋支店	052-264-7525	460-0007	名古屋市中区新栄2-28-22　NEC名古屋ビル5F
	名西営業所	052-442-7451	490-1111	海部郡甚目寺町大字甚目寺字山王22 （株）シーエスイー山王ビル
	名南支店	052-694-1031	457-0862	名古屋市南区内田橋1-8-5　アートライフ・タケセイ1F
	半田営業所	0569-22-2762	475-0903	半田市出口町1-130-1　森田ビル4F
	小牧支店	0568-75-5594	485-0029	小牧市中央1-271　大垣共立銀行小牧支店ビル4F
	豊田営業所	0565-34-1168	471-0034	豊田市小坂本町1-5-3　朝日生命新豊田ビル4F
	三河支店	0564-23-5020	444-0044	岡崎市康生通南3-5　住友生命岡崎第二ビル1F
	豊橋営業所	0532-55-3063	440-0084	豊橋市下地町瀬上83
三重	三重支店	059-227-1622	514-0042	津市新町3-2-1
	四日市営業所	0593-51-0425	510-0075	四日市市安島1-5-10　明治安田生命四日市西浦ビル2F
	伊賀上野営業所	0595-23-8914	518-0873	上野市丸之内128　共立ビル2F
滋賀	滋賀支店	077-525-3156	520-0043	大津市中央4-5-4　BKビル
	彦根営業所	0749-24-1784	522-0073	彦根市旭町8-20
	八日市営業所	0748-25-0680	527-0022	八日市市上之町2-7　ウイング八日市3F
京都	京都支店	075-812-5800	604-8804	京都市中京区壬生坊城町24-1　古川勘ビル4F
	宇治営業所	0774-20-1210	611-0042	宇治市小倉町久保111-1　辻岩ビル新館4F
	福知山支店	0773-23-6287	620-0000	福知山市駅南町3-6　竹下駅南ビル1F
	舞鶴営業所	0773-63-7236	625-0036	舞鶴市字浜160　スクウェアービル大門3F
	亀岡営業所	0771-25-7320	621-0805	亀岡市安町中畠1-2　スカイビル7F
大阪	大阪中央支店	06-6264-2834	541-0053	大阪市中央区本町2-1-6　堺筋本町センタービル5F
	寝屋川支店	072-833-5284	573-0094	枚方市南中振1-16-27　宅建ハウジングビル6F
	淀川支店	06-6305-5444	532-0011	大阪市淀川区西中島1-11-16　住友商事淀川ビル3F
	高槻支店	0726-73-5481	569-0071	高槻市城北町1-5-25　高槻FJYビル1F
	千里支店	06-6835-0017	560-0083	豊中市新千里西町1-2-2　住友商事千里ビル　南館2F
	東大阪支店	0729-24-6780	581-0803	八尾市光町1-61　嶋野・住友生命ビル7F
	南大阪支店	072-223-8595	590-0026	堺市向陵西町2-1-24
	泉南支店	0724-63-2190	598-0012	泉佐野市高松東1-10-37　泉佐野センタービル8F
兵庫	豊岡営業所	0796-24-0331	668-0043	豊岡市桜町15-1　幸栄ビル1F
	神戸支店	078-332-5431	650-0031	神戸市中央区東町126　神戸シルクセンタービル3F
	姫路支店	0792-89-2684	670-0948	姫路市北条宮の町113
	明石支店	078-914-0550	673-0892	明石市本町二丁目2番24号　明石東京海上ビルディング
奈良	奈良支店	0742-36-1161	630-8001	奈良市法華寺町219-1
	橿原営業所	0744-23-6240	634-0813	橿原市四条町277-1　シェ・ホーム・ヤマ2F
和歌山	和歌山支店	073-428-3222	640-8154	和歌山市六番丁5　和歌山第一生命ビル
鳥取	鳥取営業所	0857-28-6068	680-0911	鳥取市千代水4-97
	米子営業所	0859-22-8280	683-0805	米子市西福原2-1-1　YNT第10ビル2階
島根	山陰支店	0852-21-0988	690-0825	松江市学園1-18-5
	浜田営業所	0855-22-6092	697-0033	浜田市朝日町70-5　朝日第2ビル1F

都道府県名	拠点名	電話番号	郵便番号	所在地
岡山	岡山支店	086-246-9606	700-0976	岡山市辰巳19-102
	倉敷営業所	086-426-1371	710-0057	倉敷市昭和2-4-6　住友生命倉敷ビル2F
	津山営業所	0868-28-2649	708-0872	津山市平福181-15　カワシマ商事（株）本社ビル3Ｆ
広島	広島支店	082-248-4222	730-0042	広島市中区国泰寺町2-5-11　西橋屋ビル4F
	呉営業所	0823-21-5129	737-0051	呉市中央1-6-9　日本団体生命ビル6F
	東広島営業所	0824-22-6411	739-0003	東広島市西条町大字土与丸441-1
	三次営業所	0824-63-3186	728-0013	三次市十日市東6-13-14
	福山支店	0849-31-8907	721-0973	福山市南蔵王町3-13-12
	備後府中営業所	0847-46-4835	726-0003	府中市元町475-1　カルチャープラザ4F
	尾道営業所	0848-22-3736	722-0037	尾道市西御所町14-15　第六堀田ビル4F
山口	山口支店	083-973-1858	754-0011	吉敷郡小郡町御幸町4-9　山陽ビル小郡1F
	周南営業所	0834-31-4114	745-0063	周南市今住町3-18
	岩国営業所	0827-22-9534	740-0018	岩国市麻里布町1-5-26　岩国通運ビル2F
	下関営業所	0832-53-3230	751-0853	下関市川中豊町2-6-36
	萩地区センター	0838-22-7472	758-0022	萩市浜崎町121-1　Kビル2F
徳島	徳島支店	088-622-1270	770-0852	徳島市徳島町2-19-1　あいおい損保徳島ビル4F
香川	高松支店	087-833-1771	760-0008	高松市中野町29-2　NEC四国ビル7F
	丸亀営業所	0877-23-8563	763-0034	丸亀市大手町3-5-18　ジブラルタ丸亀ビル7F
愛媛	松山支店	089-945-4145	790-0878	松山市勝山町1-19-3　青木第一ビル5Ｆ
	八幡浜営業所	0894-24-6158	796-0031	八幡浜市江戸岡一丁目4-6　江戸岡ビル2F
	宇和島営業所	0895-25-1000	798-0032	宇和島市恵美須町2-4-14　井上ビル
	今治営業所	0898-31-5741	794-0063	今治市片山1-2-20
	新居浜支店	0897-34-4774	792-0003	新居浜市新田町3-2　住友商事新居浜ビル5F
	川之江営業所	0896-24-3855	799-0113	川之江市妻鳥町1010番地8　共和ビル102号室
高知	高知支店	088-883-8884	780-0072	高知市杉井流70-5　マノワール杉井流
福岡	福岡支店	092-472-2853	812-0004	福岡市博多区榎田2-3-27　STS第二ビル3F
	福岡中央営業所	092-472-2853	812-0004	福岡市博多区榎田2-3-27　STS第二ビル3F
	博多営業所	092-472-2853	812-0004	福岡市博多区榎田2-3-27　STS第二ビル3F
	福岡東営業所	092-472-2853	812-0004	福岡市博多区榎田2-3-27　STS第二ビル3F
	北九州支店	093-522-0581	802-0014	北九州市小倉北区砂津1-5-34　小倉興産23号館4F
	飯塚営業所	0948-24-0919	820-0005	飯塚市新飯塚13-11　北代ビル2F
	久留米支店	0942-44-5298	839-0807	久留米市東合川町2-4-29
	大牟田営業所	0944-51-2655	836-0843	大牟田市不知火町2-7-1　中島物産ビル5F
佐賀	佐賀支店	0952-31-9301	849-0937	佐賀市鍋島3-2-19
	佐賀西営業所	0954-22-6567	843-0022	武雄市武雄町大字武雄5014-1　東洋リーセントビル5F
長崎	長崎支店	095-838-4442	851-0134	長崎市田中町586-7
	佐世保営業所	0956-22-2779	857-0043	佐世保市天満町3-23
	諫早営業所	0957-23-0471	854-0016	諫早市高城町5-15　諫早商工会館5F
熊本	熊本支店	096-383-6777	862-0925	熊本市保田窪本町1-40
大分	大分支店	097-503-2555	870-0921	大分市萩原4-9-65
	中津営業所	0979-23-1182	871-0058	中津市豊田町2-423-10　6 BILL 5F
宮崎	宮崎支店	0985-27-4477	880-0806	宮崎市広島1-18-7　大同生命宮崎ビル9F
	延岡営業所	0982-35-7545	882-0872	延岡市愛宕町2-1-12　センコービルディング5F
	都城営業所	0986-23-4821	885-0021	都城市平江町13街区15　富士火災海上保険ビル3F
鹿児島	鹿児島支店	099-285-2266	890-0062	鹿児島市与次郎2-4-35　KSC鴨池ビル1F
	出水営業所	0996-62-8922	899-0202	出水市昭和町13-1　第二丸久ビル2F
沖縄	沖縄支店	098-876-2788	901-2132	浦添市伊祖2-7-11

~Memo~

用語解説

3DES：triple-DES
DESによる暗号化を3回行うもので、DESよりも暗号強度が高くなっています。

AES：Advanced Encryption Standard
AESは、DESに代わる暗号アルゴリズムとして急速に普及しています。 AESは3DESやDESよりも強力で高速であるため、 DES、3DESの両方の置き換えとして使うことができます。

AH: Authentication Header(認証ヘッダ)
IPSecで定義されるプロトコルです。IPヘッダを含めて認証を行い、転送中にパケットの内容が改ざんされていないことを確認します。

Cookie
ウェブサーバが指定するウェブクライアントの情報でウェブクライアントの端末に保存されます。再度ウェブサーバにアクセスするとき保存した情報がHTTPヘッダに書き込まれる仕組みになっています。

DDoS：Distributed DoS
クラッキング手法の1つです。ネットワークに分散する多数の端末から、一斉に目標のサーバへパケットを送信し、サーバを過負荷に陥れてサービスを停止したり、通信路をあふれさせたりする攻撃です。クラッカーは、あらかじめ攻撃対象のサーバと関連のない多くの端末に侵入して、ある条件をもとに一斉に攻撃を仕掛けるようなプログラムを埋め込ませておきます。

DES：Data Encryption Standard
アメリカの技術標準を定める政府機関において標準化された秘密鍵の暗号化形式です。秘密裏に交換された鍵を交換する方式で、56ビット長の鍵を利用します。

DMZ：DeMilitarized Zone
非武装地帯とも呼ばれ、内部ネットワークと外部ネットワークとの狭間に追加されたネットワークです。通常、外部に公開するサーバ群を配し、外部ネットワークから内部ネットワークへの通信を行わない構成とするときに用いられます。

DNS：Domain Name System
ドメイン名とIPアドレスを対応させるシステムです。

DoS：Denial of Service
クラッキング手法の1つです。ある端末から目標のサーバに過剰なパケットを送信し、サーバを過負荷に陥れてサービスを停止したり、通信路をあふれさせたりする攻撃です。

ESP: Encapsulating Security Payload
(暗号化ペイロード)
IPパケットの内容を暗号化するときに用いられるIPSecヘッダです。IPヘッダを除いて暗号化、認証を行います。

FTP：File Transfer Protocol
(ファイル転送プロトコル)
FTPサーバを介してファイルのやり取りを行うためのプロトコルです。

HTTP：Hyper Text Transfer Protocol
(ハイパーテキスト転送プロトコル)
ウェブサーバとウェブクライアント間でデータをやり取りするためのプロトコルです。

ICMP：Internet Control Message Protocol
(インターネット制御メッセージプロトコル)
ネットワーク機器間で互いの状態を確認するためにIPのエラーメッセージや制御メッセージを転送するプロトコルです。

IKE：Internet Key Exchange
(インターネット鍵交換)
IPSecによる暗号化通信の前に通信相手の認証、暗号化アルゴリズム、鍵の取り決めを行うためのプロトコルです。

IPSec：IP Security
IPパケットを暗号化するためのしくみです。まずIKEを利用して通信相手の通信相手の認証、暗号化アルゴリズム、暗号鍵の交換を行い、それをもとに暗号通信を行います。さらにデータが本物の通信相手からのものであるか、データの改ざんはないかどうかについて認証を行います。

IPアドレス
ネットワークに接続された端末や機器を識別するためのアドレスです。

JavaScript
Webブラウザ向けのJavaに似たプログラミング言語です。

MD5：Message Digest5
ハッシュアルゴリズムの1つです。128ビットのハッシュに圧縮します。

NAT：Network Address Translation
(ネットワークアドレス変換)
IPアドレスを変換する機能です。

NAPT：Network Address Port Translation
(ネットワークアドレスポート変換)
NAT機能を拡張したもので、ポート番号を利用して複数の内部IPアドレスを外部IPアドレスに動的に変換する機能です。IPマスカレードとも呼びます。

PFS：Perfect Forward Secrecy
ある鍵が解読されたとしても、その解読された鍵情報からは、その後に生成された別の鍵が解読できない性質を言います。

Ping Sweep
ある一定の範囲のIPアドレスに対してPingを発行し、応答するIPアドレスを発見するために用いられる手法です。攻撃を仕掛ける前の事前調査活動として利用されることが多いです。

RSA: Rivest Shamir Adleman
公開鍵暗号方式の暗号化アルゴリズムの1つです。Rivest氏、Shamir氏、Adleman氏が共同で開発しました。

SA: Security Association
(セキュリティアソシエーション)
IPSecで定義され、情報を保護するためのポリシーと暗号化に用いる鍵のセットで、トンネルを一意に特定し、リンクします。

SHA-1：Secure Hash Algorithm1
ハッシュアルゴリズムの1つです。160ビットのハッシュに圧縮します。

SMTP：Simple Mail Transfer Protocol
(簡易メール送信プロトコル)
電子メールを送信するためのプロトコルです。

SPI：Security Parameter Index
IPSecで定義されるSAを一意に特定するためのIDです。

SYN
TCPの制御ビットの1つです。通信相手とのコネクション確立時にSYNビットをオンにしたパケットを送信します。

SYN Flood
DoS攻撃の1つです。攻撃者は適当なIPアドレス、あるいはネットワーク上のターゲットホストのIPアドレスを送信元としてSYNパケットを大量にターゲットに送信します。

TCP：Transmission Control Protocol
(伝送制御プロトコル)
HTTP、SMTP、FTPなどの通信に利用されるプロトコルで、通信の信頼性を確保する仕組みを備えています。

traceroute
ICMPやUDPを用いて通信相手までの通信経路確認を行うために利用するコマンドの総称です。

UDP：User Datagram Protocol
DNS、DHCPなどで利用されるプロトコルで、通信制御は行わないが処理が少ない分低負荷で通信が行えます。

VPN：Virtual Private Network
(仮想専用線)
通信相手との間に構築された仮想的なプライベートネットワークです。インターネットを介しながらも独立したネットワークを利用しているかのように通信することができます。

暗号化ペイロード
→ESP(Encapsulating Security Payload)

共有鍵
あらかじめ相手と共有している鍵です。IKEの手順を踏まずにIPSec通信が行えます。

公開鍵
暗号鍵と復号鍵に異なる鍵を利用する暗号通信方式を公開鍵暗号通信方式と呼びます。公開鍵通信方式ではどちらかの鍵を公開し、もう一方の鍵を本人だけの秘密にします。公開されているほうの鍵を公開鍵と呼びます。

サブネットマスク
IPアドレスのネットワークアドレスとホストアドレスの区切りを指定するための値です。例えば、192.168.1.1/24というアドレスならば、24ビット目までがネットワークアドレスとなり、残りの8ビットがホストアドレスとなります。

自動鍵
IKEによって生成する鍵です。

セキュリティアソシエーション
→SA(Security Association)

トランスポートモード
IPSecにおけるモードの1つです。ホスト間の通信で利用されるモードで、トンネルモードのように新しいヘッダを付加することはありません。

トンネルモード
IPSecにおけるモードの1つです。ゲートウェイ間、あるいはゲートウェイ対ホスト間で利用されるモードで、新しいヘッダを付け加えます。

認証ヘッダ
→AH(Authentication Header)

秘密鍵
公開鍵暗号通信方式において自分だけの秘密にしておく鍵を秘密鍵と呼びます。

プロキシ
内部ネットワークの各端末の通信を代理で実行する機器、またはプログラムのことです。外部ネットワークから内部ネットワークへの通信、内部ネットワークから外部ネットワークへの通信を制御するときに有効です。

ポート番号
HTTP、SMTP、FTPなどの通信種別を判別するために用いられる番号です。通常サーバにはあらかじめ決められたポート番号を設定します。クライアントには自動的に空いている番号が割り当てられます。

索　引

マ

メ

ユ

ヨ

ラ

リ

ル

レ

ロ

The BSD Copyright

GNU GENERAL PUBLIC LICENSE
Version 2, June 1991

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it toyour programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps:(1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program(independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program(or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>
Copyright (C) 19yy  <name of author>

This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 2 of the License, or
(at your option) any later version.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License
along with this program; if not, write to the Free Software
Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA  02111-1307  USA
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19yy name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

GNU LESSER GENERAL PUBLIC LICENSE
Version 2.1, February 1999

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANYKIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public
License along with this library; if not, write to the Free Software
Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your
school, if any, to sign a "copyright disclaimer" for the library, if
necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the
library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

■ 謝辞

Linus Torvalds氏をはじめとするLinuxに関わるすべての皆様に心より感謝いたします。

NEC　Express5800 サーバ
Express5800 シリーズ
InterSec
N8100-909

Express5800/SG300a

ユーザーズガイド
2003 年　　4 月　初版
2003 年　11 月　第 2 版
2004 年　　4 月　第 3 版
2004 年　11 月　第 4 版

日　本　電　気　株　式　会　社
東京都港区芝五丁目 7 番 1 号
TEL（03）3454-1111（大代表）

<本装置の利用目的について>

本製品は、高速処理が可能であるため、高性能コンピュータの平和的利用に関する日本政府の指導対象になっております。
ご使用に際しましては、下記の点につきご注意いただけますよう、よろしくお願いいたします。

1. 本製品は不法侵入、盗難等の危険がない場所に設置してください。
2. パスワード等により適切なアクセス管理をお願いいたします。
3. 大量破壊兵器およびミサイルの開発、ならびに製造等に関わる不正なアクセスが行われるおそれがある場合には、事前に弊社相談窓口までご連絡ください。
4. 不正使用が発覚した場合には、速やかに弊社相談窓口までご連絡ください。

弊社相談窓口　ファーストコンタクトセンター
電話番号　03-3455-5800

注　意

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に接近して使用されると電波妨害を引き起こすことがあります。本書に従って正しい取り扱いをしてください。

高調波適合品

この装置は高調波電流規格　JIS C 61000-3-2 適合品です。

：JIS C 61000-3-2 適合品とは、日本工業規格「電磁両立性－第3-2部：限度値－高調波電流発生限度値（1相当たりの入力電流が20A以下の機器）」に基づき、商用電力系統の高調波環境目標レベルに適合して設計・製造した製品です。

電源の瞬時電圧低下対策について

この装置は、落雷等による電源の瞬時電圧低下に対し不都合が生じることがあります。電源の瞬時電圧低下対策としては、交流無停電電源装置（UPS）等を使用されることをお勧めします。

回線への接続について

本体を公衆回線や専用線に接続する場合は、本体に直接接続せず、技術基準に適合し認定されたボードまたはモデム等の通信端末機器を介して使用してください。

レーザ安全基準について

この装置に標準で搭載されているCD-ROMドライブは、レーザに関する安全基準（JIS・C-6802、IEC60825-2）クラス1に適合しています。

海外でのご使用について

この装置は、日本国内での使用を前提としているため、海外各国での安全規格等の適用を受けておりません。したがって、この装置を輸出した場合に当該国での輸入通関および使用に対し罰金、事故による補償等の問題が発生することがあっても、弊社は直接・間接を問わず一切の責任を免除させていただきます。